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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/331,723	08/18/1999	JOHN E. BOYNTON	2185-156PCT	2008

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EXAMINER

MEHTA, ASHWIN D

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 07/22/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/331,723

Applicant(s)

BOYNTON ET AL.

Examiner

Ashwin Mehta

Art Unit

1638

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1,2,6,7,10-16,18,20-24,41 and 42.Claim(s) withdrawn from consideration: 3, 5, 17, 19, 25-40.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____

Continuation of 3. Applicant's reply has overcome the following rejection(s): objections to claims 1, 2, 4, 7, 10-14, 15, 16, 18, 21, and 24, rejection to claims 1, 2, 4, 6, 7, 10-16, 18, 20-24, 41, and 42 under 35 U.S.C. 112, 2nd paragraph.

Continuation of 5. does NOT place the application in condition for allowance because: Applicants argue, in relation to the written description rejection, that the wild type sequence of the Chlamydomonas PPO gene is shown in SEQ ID NO: 10, and that a mutation of the Val13 residue of the Chlamydomonas PPO protein is what confers resistance to PPO herbicides (response, page 8, first two paragraphs). However, SEQ ID NO: 10 is not the full wild type sequence of the Chlamydomonas PPO gene, but sets forth only a portion of the gene. Val13 is the position of the amino acid sequence encoded by SEQ ID NO: 10, however, this amino acid sequence is only a portion of the PPO enzyme. Applicants argue that homologous recombination obviates the necessity to correlate the structure of the DNA fragment itself with PPO activity (page 9, 2nd full paragraph to the paragraph bridging pages 9-10). However, while homologous recombination of introduced transgenes may occur in Chlamydomonas, it does not occur in all plants. This event will not provide any description of the protein encoded by the gene from which the claimed DNA fragment originated. Further, homologous recombination does not obviate the necessity for a structure/function correlation, as the claims require one to determine that the protein, of which the claimed DNA fragment encodes a portion, has to possess PPO activity. Regarding the enablement rejection of the pending claims, Applicants argue that the specification meets the Wands factors and that ample guidance is provided by working examples and other disclosure in the specification. However, the specification does not teach the full amino acid sequence of the protein that comprises SEQ ID NO: 1, and one skilled in the art cannot determine if the protein that comprises the sequence encoded by the claimed DNA fragments has the same activity.



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